AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0021] with the following amended paragraph:

[0021] FIG. 1 is a block diagram illustrating an exemplary computer environment 2 in which a client computing device 4 presents an environment for modeling a three-dimensional (3D) representation of a dental arch of patient 6. Orthodontic practitioner 8 interacts with modeling software executing on client computer device 4 to visualize the 3D representation of the dental arch, and precisely position "virtual" brackets 5A on individual teeth within the modeled dental arch.

Please replace paragraph [0023] with the following amended paragraph:

[0023] As described in detail herein, the modeling software presents planar guides to visually aid practitioner 8 in the placement and adjustment of the brackets 5A within the 3D environment relative to their respective teeth. Each planar guide may be visually represented as a semi-transparent two-dimensional plane. The modeling software generates the planar guides within the 3D environment based on a coordinate system associated with the bracket currently being positioned or adjusted by practitioner 8. As a result, the modeling software automatically adjusts the 3D location and orientation of the planar guides as the practitioner adjusts the bracket with respect to the tooth. Consequently, the planar guides provide a good visual indication of the position of the bracket relative to the tooth on which the bracket is being placed. The techniques may readily be applied to positioning and orienting other types of orthodontic appliances relative to teeth or other regions of a dental arch. For example, the techniques may readily be used to assist a practitioner in placing, positioning, forming or otherwise designing a wide variety of appliances, such as buccal tubes 5B, buttons 5C, sheaths 5D, arch wires 5E, and other orthodontic appliances.

Please replace the Abstract, which begins at page 30, line 6, with the following amended Abstract:

Techniques are described for providing an environment for modeling and depicting a three-dimensional (3D) representation of a patient's dental arch to assist practitioners in orthodontic diagnosis and treatment. A system is described, for example, that includes modeling

software executing on a computing device to provide a three-dimensional (3D) environment. The modeling software ~~comprises~~ <u>includes</u> a rendering engine that renders a digital representation of a dental arch within the 3D environment, and a user interface that displays a planar guide within the 3D environment as a visual aid to a practitioner in the placement of an orthodontic appliance relative to the dental arch. By interacting with the system, orthodontic practitioners are able to visualize the 3D representation of the dental arch, and precisely position "virtual" orthodontic appliances relative to the modeled dental arch.